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THE DIRECTOR OF MOBILITY FORCES AND  
COMMAND AND CONTROL OF AIRLIFT

Graduate Research Project

Mark A. Melville, Major, USAF

AFIT/GMO/LAL/96N-08

DEPARTMENT OF THE AIR FORCE  
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**AIR FORCE INSTITUTE OF TECHNOLOGY**

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THE DIRECTOR OF MOBILITY FORCES AND  
COMMAND AND CONTROL OF AIRLIFT

Presented to the Faculty of the Graduate School of  
Logistics and Acquisition Management of the

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Master of Air Mobility

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Without the love and support of my wife, Connie, and our children through this difficult program, I would not have been successful. Their unfailing faith was an example to me.

The idea for this paper came from Major Goose Moncrief, a gentleman and a warrior.

Mark A. Melville

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*Abstract*

The Air Force reorganization in 1992 changed the way in which airlift forces were organized, commanded and deployed. The reorganization eliminated the Airlift Divisions and created two airlift systems. The theater cargo aircraft were assigned to the theater commanders or to Air Combat Command. The strategic aircraft and support assets were assigned to Air Mobility Command. Both airlift systems must function together during a contingency to provide cargo movement.

This project identifies a problem with the command of the airlift system and proposes a solution. In the process, it defines the key personnel and organizations that make up the airlift command and control structure. The paper also defines the necessary command relationship terms of combat command (COCOM), operational control (OPCON), tactical control (TACON), and support. It also identifies other relationships, such as coordinating authority and direct liaison authorized (DIRLAUTH).

The primary conclusion is that the director of mobility forces (DIRMOBFOR) should have the authority to effectively command and control both airlift systems. Specifically, the DIRMOBFOR should be given OPCON or TACON over the forces that make up the airlift system.



# THE DIRECTOR OF MOBILITY FORCES AND COMMAND AND CONTROL OF AIRLIFT

## *I. Introduction*

*Far more successful than the Russians in hamstringing the Berlin Airlift were the same old bugaboos I had experienced in India--divided command for one, and conflict between senior officers.*

William H. Tunner, Lt. General USAF,  
Commander, First Airlift Task Force

In a briefing at the Air Mobility Warfare Center a high ranking officer, using academic freedom, stated that the Joint Endeavor airlift was a failure and clearly demonstrated a problem with the current airlift structure. In numerous site visits during the Advanced Study of Air Mobility (ASAM) course, briefers admitted disappointment with the current airlift system. At US European Command (USEUCOM) the briefers voiced frustration in controlling airlift, because of the two command structures. At US Air Forces Europe (USAFE) the problem with the current airlift structure is so frustrating that an airlift planner requested the ASAM class receive his briefing. The briefing was a detailed analysis of the current structure, problem, and a proposal for achieving seamless air mobility. United States Transportation Command (USTRANSCOM) and Air Mobility Command (AMC) both expressed frustrations with the Joint Endeavor command and control structure and how it functioned. The Tanker Airlift Control Center (TACC) commander commented that the TACC should and could, with some additional

personnel, control the theater airlift operation. The seam between the two systems is especially frustrating to USTRANSCOM and AMC. USTRANSCOM's objective, to provide global mobility for the United States military, is hindered by the seam in the airlift system.

The seam in a transportation system is typically the weakest area. In his logistics management course, Major Terrance L. Pohlen, Assistant Professor of Logistics Management at the Air Force Institute of Technology, stated that many of the problems with transportation occur at the seams. The seam is where the transportation manager needs to focus his attention in order to improve efficiency.

Coordination problems between the airlift systems were apparent at Rhein-Main Air Base in Germany during operation Joint Endeavor.

At Rhein-Main, at least five different people had a piece of the responsibility for the operation--the USAFE base commander, 626 [Air Mobility Support Squadron] AMSS commander, Charleston LG commander (who assumed responsibility for en route and theater aircraft maintenance), C-141 mission commander, and the C-17 mission commander. Confusion, especially in light of poor visibility of forecast cargo, often ruled the day with the organization producing as many as four different airlift schedules--an ATOC schedule maintenance schedule, a C-141 operation schedule, and a C-17 operation schedule. (JULLS 11056-47252, 1995)

Additionally, the problem associated with the airlift system is so severe that it will be a topic at the fall 1996 CORONA, the annual conference of top Air Force leadership.

Lieutenant Colonel Krisinger, a C-130 airlift pilot on the J-5 staff at US European Command, makes this point in his article published in the June 1996 edition of the

*Defense Transportation Journal* "Airlift to the Balkans: Something Old Something New."

This lack of centralized focus and control that a single-manager, consolidated system brings also extended the loss of synergies beyond passenger and cargo movement to include the use of other airlift system components like transportation, maintenance, logistics, and [command and control] C2. Furthermore, the European theater airlift arrangements are typical of what can be found in any of the other theaters. So for airlift support to a theater, the intent of the Air Force restructuring to consolidate controlling authority for theater operations actually decreases the performance, effectiveness, and efficiency of airlift in supporting the theater commander. (Krisinger, 1996:17)

### *Problem Statement*

The current military airlift structure is divided into theater and strategic systems which are commanded and controlled by different people and organizations. This divided airlift system creates confusion and inefficiency in cargo movement during contingencies. This problem is especially acute at the seam between the two systems.

### *Definitions*

There are many organizations and personnel involved in an airlift operation. Some of these organizations originate in the theater and some deploy from AMC state-side units. Organizations, personnel, and their relationships to one another are depicted in Figure 1. The definitions begin with the theater command personnel and organizations. These definitions are followed by the AMC components.

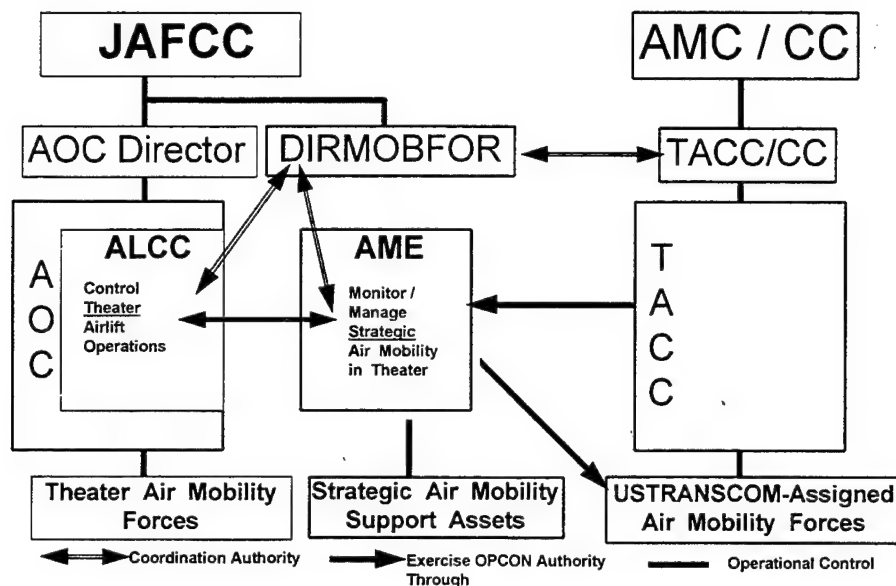


Figure 1. Airlift Command Relationships (Begert, 1995)

*Definition and responsibilities of the Joint Force Air Component Commander (JFACC).* “The responsibilities of the JFACC are assigned by the JFC [Joint Force Commander]. These include, but are not limited to: planning, coordination, allocation, and tasking of joint air operations based on the JFC’s concept of operations and air apportionment decision” (JP 3-56.1, 1994:II-2). The JFACC is the single commander of the theater air forces.

*Definition of the Air Operations Center (AOC).* The Air Operations Center is the organization through which the Air Force Component Commander (AFCC) or JFACC

controls the air operations, including the theater airlift (JP 3-17, 1995: II-1). The AOC is the operations center for the theater air forces.

*Definition of the Airlift Coordination Cell (ALCC).* The Airlift Coordination Cell is located within the AOC and is responsible for planning, coordinating, managing, and executing theater airlift operations in the Area of Responsibility (AOR). The ALCC normally consists of a plans branch, an operations branch and a logistics branch (JP 3-17, 1995:GL-5). The ALCC plans, and executes theater airlift operations. It is part of the AOC and coordinates with the Air Mobility Element (AME) and the Director of Mobility Forces (DIRMOBFOR).

*Definition of DIRMOBFOR.* According to Joint Publication 3-17,

The DIRMOBFOR will normally be a senior officer who is familiar with the AOR or joint operation area (JOA) and has an extensive background in airlift operations. The DIRMOBFOR may be sourced from the theater's organizations, or nominated by USTRANSCOM, or United States Atlantic Command. When established, the DIRMOBFOR serves as the designated agent of the JFACC or AFCC, for all airlift issues. The DIRMOBFOR exercises coordinating authority between the ALCC, AME, TACC, [the Joint Movement Center] JMC, and AOC in order to expedite the resolution of airlift problems. (JP 3-17, 1995:II-3, II-4)

The DIRMOBFOR works for the AFCC or the JFACC, he or she has coordinating authority with the ALCC, which is part of the AOC, the TACC, and the AME.

*Definition of the Air Mobility Element.* The AME is a deployed AMC group responsible for monitoring, coordination, and reporting to the TACC on all USTRANSCOM-assigned, TACC controlled strategic mobility missions supporting the theater. The AME advises, coordinates with, the DIRMOBFOR and the ALCC on

strategic mobility activities supporting the theater (AMCI 10-202, Vol. 3, 1995:5) The AME is part of Air Mobility Command and is not part of the theater forces. It is used to monitor and control the strategic airlift and air refueling forces operating to and from the AOR.

*Definition of Tanker Airlift Control Center (TACC).* The TACC is “the Air Mobility Command direct reporting unit responsible for tasking and controlling operational missions for all activities involving forces supporting US Transportation Command's global air mobility mission” (JP 1-02, 1994:413).

*Definition of the Tanker Airlift Control Element (TALCE).* The Tanker Airlift Control Element is a deployable command and control unit used to support strategic and theater air mobility operations. A TALCE provides on-site management of airfield operations including C2, communications, aerial port, maintenance, security, services, weather, and contracting. “Since TALCEs are deployed primarily to support AMC’s global air mobility mission, they will normally remain under [Operational Control] OPCON of [Commander of AMC] COMAMC” (AMCI 10-202, vol. 3, 1995:18).

It is essential to understand the relationships and organizations which are involved in command and control of airlift to understand the airlift problem. The DIRMOBFOR and the organizations that make up the airlift command and control system were created as a result of the restructuring and down-sizing of the Air Force.

## *II. History of Airlift Command and Control*

To better understand the airlift command and control problem, it is necessary to explain how the current airlift structure developed. This history will examine the global airlift command structure subsequent to the 1992 Air Force restructure, the structure immediately after the restructuring, and the current airlift command and control structure.

### *Airlift Structure Prior to 1992*

Prior to the reorganization, the airlift command and control system was simpler. All common user airlift aircraft and support assets were in Military Airlift Command (MAC), as shown in Figure 2. At that time, MAC maintained an Airlift Division (ALD) in Europe and in the Pacific. The ALDs were commanded by a MAC general officer who could become the Commander of Airlift Forces (COMALF) when a contingency arose. The ALDs possessed a large airlift staff and provided the personnel to form the ALCC during a contingency. In addition to a large staff, the ALDs had the supporting equipment and personnel for running the airlift operation in peace and war. This support included aerial port operations, aircraft maintenance, and command, control and communications.

Strategic assets assigned to USTRANSCOM were also under the control of the COMALF. The COMALF was able to exercise command authority over the strategic

assets, controlling the entire airlift system. The restructuring and down-sizing of the Air Force dramatically changed the airlift system.

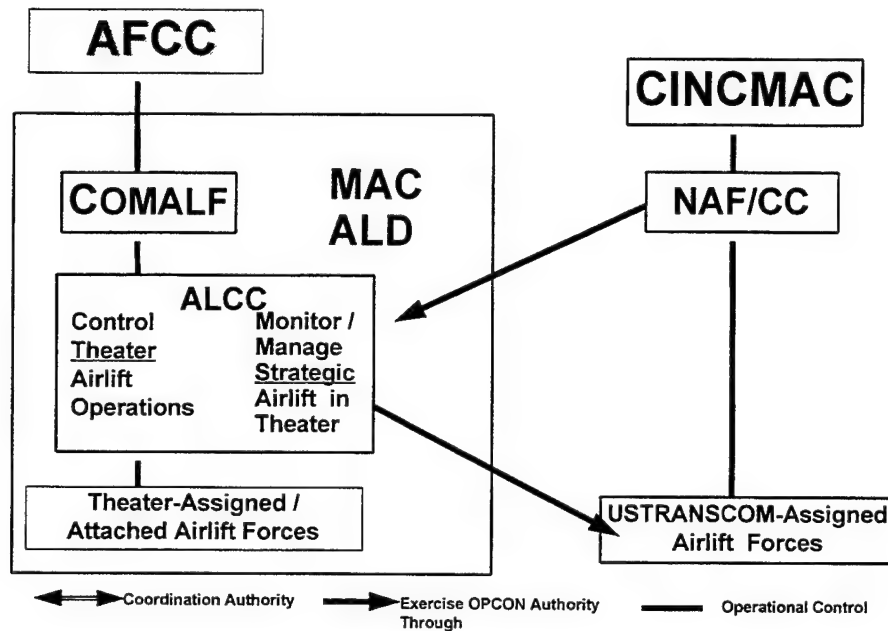


Figure 2. Pre-1992 Airlift C2 Structure (Lambaria, 1996)

### *Airlift Structure After the 1992 Reorganization*

After the Air Force restructure, the ALDs were closed and the personnel reassigned. The theaters lost most of their airlift expertise as well as the ALD commander. Military Airlift Command changed its name to Air Mobility Command (AMC) and the C-130 aircraft were reassigned to the theater commanders and Air Combat Command (ACC). The airlift supporting structure, loading and unloading equipment and personnel, were assigned to AMC. A small contingent of support assets



remained in the theater to provide airlift support to the strategic and theater airlift fleet. These assets were assigned to AMC and manned to service day to day operations tempos. This reorganization created a void in the theater airlift structure. The COMALF and all the supporting staff that existed between the Air Force Component Commander and airlift forces were gone. Additionally, the link between the strategic airlift system and the theater airlift system, as shown in Figure 3, ceased to exist. The change in the overseas airlift structure and loss of manpower required AMC to develop the concept of global reach lay-down.

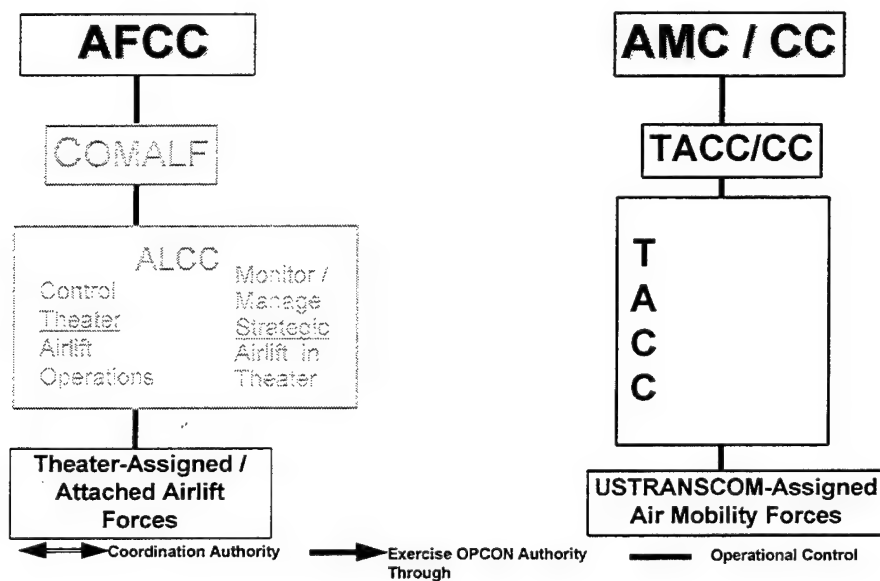


Figure 3. Theater C2 Structure 1992 (Lambaria, 1996)

### *Current Airlift Command Structure*

The solution to fill the void in the theater airlift staff and bring the separate systems together was to provide the theater commander an AME, DIRMOBFOR, and TALCEs. This solution, known as Global Reach Lay-down (GRL), provides capability to the theater that would have formerly existed with the ALD. Since AMC assets in the theaters are manned for day to day operations tempos, additional manpower is required to augment the theaters in time of contingency or war. GRL consists of AMEs, TALCEs and the DIRMOBFOR, as shown in Figure 4. The Air Mobility Element deploys from AMC and teams up with existing theater airlift personnel in the ALCC to control the AMC missions. Although the AME and ALCC are separate organizations, under separate commanders, they work closely to coordinate the airlift system. The majority of the air mobility support assets come from AMC as TALCEs. To tie the two airlift systems together and to provide a senior airlift officer to the theater AMC created the DIRMOBFOR.

The DIRMOBFOR was to be the airlift expert to the JFACC and to represent AMC assets supporting the theater commander. The DIRMOBFOR would work for the theater commander to resolve airlift issues. However, the DIRMOBFOR was not to have control over the airlift forces in the operation. Rather, he or she would coordinate between the theater and the TACC.

The evolution of the current airlift structure, due to restructuring and loss of personnel, created two airlift systems: theater and strategic. The two systems are

dependent upon one another to provide airlift support to the warfighter. This change in organization of the airlift system was formalized by new Air Force doctrine. Air Force doctrine clearly defines the two airlift systems and their separate command structures in Air Force Doctrine Document 30.

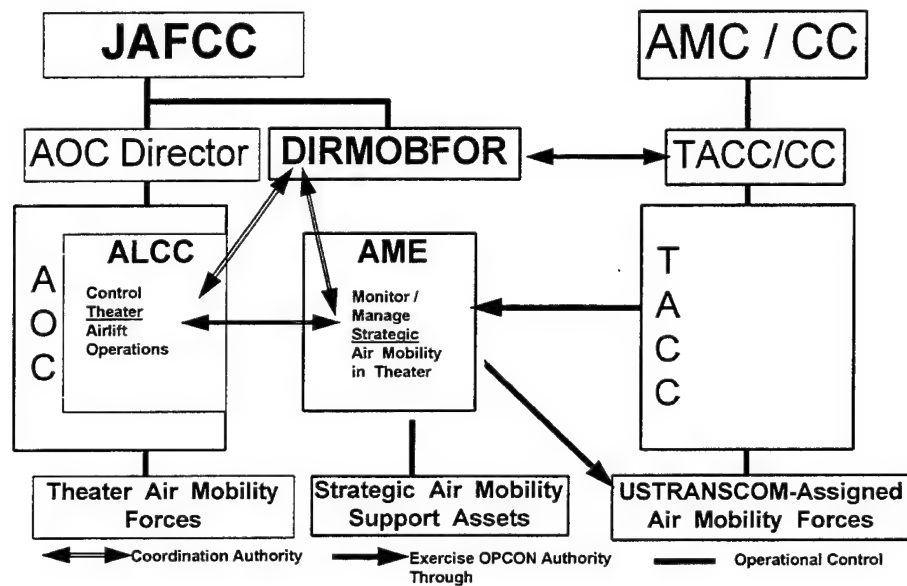


Figure 4. Current Air Mobility C2 Structure (Lambaria, 1996)

### *III. Airlift Command and Control Doctrine*

*At the very heart of war lies doctrine. It represents the central beliefs for waging war in order to achieve victory. . . It is the building material for strategy. It is fundamental to sound judgment.*

General Curtis E. LeMay, USAF

Current U.S. Air Force doctrine states that “the most effective and efficient scheme is control of all aerospace assets by a single joint force air component commander responsible for integrating employment of all aerospace forces within a theater of operations” (Air Force Manual 1-1, 1992: 114). Theater airlift command and control is held by the theater commander. The theater Commander in Chief (CINC) commands the theater airlift forces via the Air Force Component Commander (AFCC). “The AFCC or the joint force air component commander (JFACC), if established, will normally exercise operational control (OPCON) of common-user theater airlift forces” (JP 3-17, 1995:I-1).

Theater airlift is defined in Air Force Doctrine Document (AFDD) 30 as “airlift of personnel and materiel within a CINC's area of responsibility (AOR) and occasionally outside the AOR” (AFDD 30, 1995:8). Theater airlift forces are either assigned or attached to a theater CINC. Theater airlift is considered a common user asset whose capacity is apportioned in accordance with guidance from the Joint Force Commander. “The theater CINC will exercise [combatant command] COCOM of assets that are assigned in the Forces For Unified Commands Memo, or OPCON if the theater airlift forces are attached by the [Secretary of Defense] SECDEF” (AFDD 30, 1995:8).

Theater airlift assets have been assigned or attached to all five geographic unified commands. US European Command (USEUCOM), US Southern Command (USSOUTHCOM), US Atlantic Command (USACOM) and US Pacific Command (USPACOM) maintain their own theater airlift forces. US Central Command (USCENTCOM) is provided theater airlift support by units deployed from USACOM (AFDD 6, 1996:12). During a contingency additional C-130s, from USACOM, could be attached to USEUCOM.

Strategic airlift, however, does not fall under the control of the theater commander but continues to be controlled by USTRANSCOM from the Tanker Airlift Control Center at Scott Air Force Base. Strategic airlift is defined in Air Force Doctrine Document 30, *Airlift Operations* “as intertheater airlift or global airlift, [it] provides the airbridge that links overseas theaters to the continental United States and to other theaters as well as the airlift within the United States” (AFDD 30, 1995:8). Strategic airlift is considered a limited national resource.

The control of strategic airlift is maintained above the theater level because of the limited number of resources and the need to treat all the theaters as one large global theater. “The available airlift capacity that these forces provide is apportioned among the Services and joint forces on a common-user basis in accordance with guidance from the [National Command Authorities] NCA. . . . The Secretary of Defense, through the Chairman of the Joint Chiefs of Staff (CJCS), is the apportioning authority” (AFDD 30,

1995:8). Strategic airlift is considered common user airlift. This ensures the airlift priorities of the entire DOD are not usurped by the priorities of the theater commander.

Current airlift organizational doctrine, as explained in AFDD 30, *Airlift Operations*, defines the airlift command structure (See Figure 5). "Airlift forces are organized along functional lines. Strategic and theater airlift assets operate with distinct and separate command relationships. Forces intended for strategic use come under the COCOM of [Commander, US Transportation Command] (USCINCTRANS)" (AFDD 30, 1995:11). The separate theater airlift command organization is also defined in AFDD 30. "On the other hand, forces earmarked to function in the theater airlift role are organized separately under the COCOM (CINCs only) or OPCON of a JFC" (AFDD 30, 1995:11). Airlift forces support a commander in accomplishing the primary mission. "Since airlift is nearly always supporting either a JFC or a specific user, the supported/supporting commander relationship is important in defining authority and responsibilities during airlift operations" (AFDD 30, 1995:11)

The current doctrine defines the airlift structure as two systems under the command of two unified commanders. During a major regional contingency these two systems will need to function together to provide support to the theater commander. The authority given to the various commanders, including an airlift commander, is a central part of command and control.



#### *IV. Command Relationships*

An important part of understanding the doctrine of command and control is the command relationships, and the authority of the various commanders. These command relationships dictate the type of authority the commander possesses. There are several levels of authority defined in the joint publications. There are four types of command authority shown in Figure 6: combatant command (COCOM), operational control (OPCON), tactical control (TACON), and support. The other types of authority are: coordinating authority, administrative control (ADCON), and direct liaison authorized (DIRLAUTH).

##### *Combatant Command*

Of the four types of command authority available to an airlift commander, combatant command is unique to the combatant commander (CINC). Combatant command allows the commander to assign subordinate commanders, relate with other DOD agencies, and convene courts-martial. Combatant command also provides the commander the authority to make budgeting inputs to the budget process and directive authority for logistics (JP 0-2, 1995:III-3). Combatant command cannot be delegated so it is not an authority the airlift commander can exercise. This is the authority CINCTrans exercises over strategic airlift.



## *Operational Control*

Operational control can be delegated by the combatant commander and can be exercised by commanders at any level at or below the combatant commander. OPCON is the authority to:

Establish support relationships among subordinates, and designate coordinating authorities. . . . Give direction to subordinate commands and forces necessary to carry out missions assigned to the command. . . . Prescribe the chain of command to the commands and forces within the command. . . . Organize commands and forces within the command. . . . Employ forces within the command, to carry out the missions assigned. . . . Suspend from duty and recommend reassignment of any officer assigned to the command. . . . Assign responsibilities to subordinate commanders for certain routine operational matters that require coordination of effort of two or more commanders. (JP 0-2, 1995:III-9)

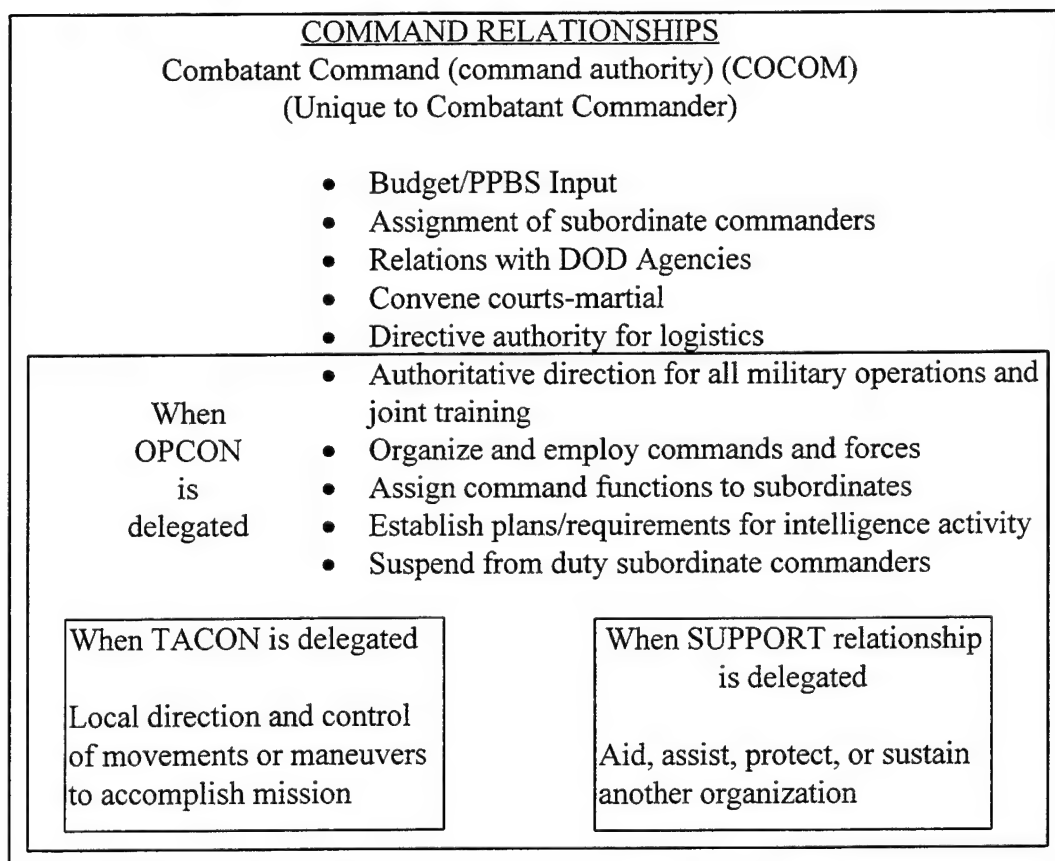


Figure 6. Command Relationships, (JP 0-2, 1995:III-3)

When OPCON is changed from one commander to another those forces are said to change operational control (CHOP). "A force assigned or attached to a combatant command may be transferred from that command only as directed by the Secretary of Defense and under procedures prescribed by the Secretary of Defense and approved by the President" (JP 0-2, 1995:III-3). When operational control is changed from one CINC to another, COCOM does not change. An example of airlift forces being CHOPed would be a Dyess Air Force Base C-130 unit being temporally stationed in Europe during a contingency. That C-130 unit would CHOP from ACC to USAFE.

#### *Tactical Control*

The authority of tactical control (TACON), "is the authority for controlling and directing the application of force or tactical use of combat support assets" (JP 0-2, 1995:III-9). Tactical control is limited to the detailed and usually local direction and control of movements or maneuvers necessary to accomplish assigned missions or tasks. Tactical control does not provide organizational authority or authoritative direction for administrative and logistic support. The commander of the parent unit continues to exercise authority unless otherwise specified in the Establishing Directive. Tactical control is typically exercised over military capability or forces made available to the functional component for tasking (JP 0-2, 1995:III-9,10). "The biggest difference between OPCON and TACON is TACON does not provide organizational authority. In other words, while TACON includes authority for the direction and control necessary to

accomplish assigned missions or tasks, it does not give the commander the authority to reorganize units” (JFACC Primer, 1994:10).

### *Support*

Support is the forth type of command authority. It is used to establish the supporting and supported relationships “when one organization should aid, protect, complement, or sustain another force” (JP 0-2, 1995:III-10). It is common for USTRANSCOM to be designated the supporting organization, and the theater CINC designated the supported command. During a contingency in one theater of operations, other CINCs may be designated as supporting organizations. For example, if the contingency is in the Middle East then US Central Command (USCENTCOM) would be designated the supported CINC. Because of the location of the Middle East the lines of communications would pass through both Europe (USEUCOM) and the Pacific (USPACOM). In this situation USCENTCOM would be the supported CINC and USTRANSCOM, USEUCOM, and USPACOM would be the supporting CINCs. The nature of USTRANSCOM and airlift result in them being designated in the supporting roll for most contingencies.

When the supported/supporting relationship is developed an Establishing Directive is issued and the command relationships are defined. The purpose of the Directive is to specify the type and the duration of support required. The Establishing Directive will also define “the degree of authority granted to the supported commander over the supporting effort” (JP 0-2, 1995:III-11). This degree of authority, granted to the

supported commander, could be OPCON, TACON, or one of the other authorities, i. e. coordinating authority.

### *Coordinating Authority*

Coordinating authority is defined in Joint Publication 0-2. It gives the commander the ability to require consultation, but not the authority to compel agreement.

Coordinating authority is the authority delegated to a commander or individual for coordinating specific functions and activities involving forces of two or more Military Departments or two or more forces of the same Service. The commander or individual has the authority to require consultation between the agencies involved but does not have the authority to compel agreement. Coordinating authority is a consultation relationship between commanders, not an authority by which command may be exercised. It is more applicable to planning and similar activities than to operations. (JP O-2, 1995:III-12)

Coordination authority is not an authority by which command is exercised, it is more applicable to planning than operations. This does not allow a commander the ability to control the airlift system.

### *Direct Liaison Authorized*

An important relationship in the airlift system will be Direct Liaison Authorized (DIRLAUTH). Due to the dual command situation, USTRANSCOM controlling the strategic system and the theater CINC controlling the theater assets, the need for liaison is essential. Direct Liaison Authorized is:

That authority granted by a commander (any level) to a subordinate to directly consult or coordinate an action with a command or agency within or outside of the granting command. Direct liaison authorized is more applicable to planning than operations and always carries with it the requirement of keeping the commander granting direct liaison authorized

informed. Direct liaison authorized is a coordination relationship, not an authority through which command may be exercised. (JP 0-2, 1995:III-12)

#### *Summary of Airlift Command Authority*

The commanders in the airlift system exercise various types of authority over the components. The theater CINC and CINC USTRANSCOM exercise COCOM over the forces attached to them. Combatant command cannot be delegated or transferred. The JFACC and the commander of AMC and ACC exercise OPCON over the forces assigned or attached to them. Operational command can be transferred to another commander, but it takes approval of the SECDEF to return OPCON to the original commander. For this reason AMC is very reluctant to CHOP forces to the theater commander. The DIRMOBFOR exercises coordinating authority between the ALCC, TACC and the AME. The ALCC, TACC and AME will normally exercise TACON over forces they control.

## *V. Discussion*

“Global Reach--Global Power,” the Air Force mission statement, emphasizes the worldwide commitment of the US Air Force. Airlift is a critical portion of the Air Force’s ability to achieve global reach as well as global power. The Air Force is not the only service dependent on airlift to deploy to the fight. The US Army relies heavily on air mobility to get the soldier to the fight and keep him there. An efficient airlift structure is essential to accomplish the mission of airlift--cargo movement.

### *Effects of the Reorganization on the Airlift Structure*

The Air Force manpower reductions, especially overseas, resulted in the loss of airlift personnel, supporting staff, and infrastructure in the theaters. The elimination of the Airlift Divisions resulted in the loss of the ALD commander. The commander was the senior airlift officer in the theater, and the person typically used as the COMALF during contingency operations. The reassignment of the ALD staff caused virtually a total removal of airlift expertise from the theater. The reorganization reassigned much of the supporting assets to AMC, leaving the theaters with aircraft, but without a supporting staff and assets.

The reorganization created two airlift systems. The C-130s were assigned to the theater commanders and Air Combat Command. A majority of the theater airlift infrastructure was assigned to AMC. The theater was left with an airlift system consisting of a wing of C-130 aircraft and a wing command structure. The strategic airlift

system under AMC, controlled the large airlift aircraft (C-5, C-17, C-141, and KC-10). AMC also controlled most of the mobility support assets and personnel. The theater airlift system and the theater commander, are now dependent upon AMC and the concept of global reach lay-down to provide the infrastructure to manage and run the airlift operation. These two airlift systems, one under the command of USTRANSCOM and one under command of the theater CINC, must function together during a contingency to successfully accomplish the airlift mission.

### *Problems with the Airlift System*

A typical example of the conflict which exists due to the divided airlift system is at Ramstein Air Base, Germany. Ramstein is a good perspective from which to view the problem of divided command, because that is where the strategic airlift system meets the theater airlift system. Ramstein is a seam in the transportation system, and at the seams is where efficiency breaks down.

In an August 1996 meeting at the 621 Air Mobility Support Group, Captain Cwiklik of the aerial port squadron described the following problem that exists between the AMC aerial port personnel and the USAFE C-130 wing. The USAFE C-130 airlift units do not have aerial port equipment and personnel to load and unload their aircraft. They are dependent upon the AMC tenant unit, the 623 Air Mobility Support Squadron. Aerial port operations are beset with a continuing problem of having enough operating material handling equipment (MHE). In the Air Force, MHE is old and hard to keep

operational. Overusing MHE unwisely and wearing it out would cripple an airlift because the cargo could not be loaded or unloaded.

Ramstein has an AMC ramp and several dispersed aircraft parking areas. There is a large AMC parking area for loading and unloading cargo. The AMC aircraft park at the AMC ramp while the C-130s are parked at other smaller areas and in the dispersal areas. The AMC personnel would prefer to load/unload all the aircraft at the AMC ramp to save the MHE, reduce the loading time and eliminate the requirement to drive the MHE to the distant parking areas. However, the C-130 wing refused, not wanting the aircrews to report early to taxi to the AMC ramp for loading and unloading (Cwiklik, 1996). In this situation, regardless of which side is right, it is difficult to improve the efficiency of the seam in the airlift system. There is no one with the authority to control both sides of the seam. This conflict in the airlift system exists during day to day operations. The conflict between the two systems would be intensified during a contingency when the number of aircraft and operating tempos increases dramatically.

The seam in the airlift system has frustrated USTRANSCOM's efforts to achieve visibility of cargo. This effort, referred to as intransit visibility (ITV), is an attempt to show the customer (the supported CINC) where the cargo is in the airlift system. "We [USTRANSCOM] have decent intransit visibility on intertheater airlift missions. However, once the cargo is delivered to a theater staging location, we lose sight of it" (JULLS 10247-26003, 1996). The loss of ITV is caused by computer interface problems



between the theater and strategic systems, and operator errors in the theater. (JULLS 10247-26003, 1996)

The frustration in controlling the airlift system during Joint Endeavor was equally shared by USTRANSCOM, AMC, and the theater commanders at USEUCOM and USAFE.

The theater AFCC--in this case USAFE--did not have the control, visibility over, or responsibility for those C-17s that flew a substantially larger share of the theater load than its own European based C-130s. The C-17s along with other AMC aircraft--C-141s and C-5s--flying traditional European theater missions to the Balkans in support of the theater commander, operated through a predominantly AMC/USTRANSCOM command, control and support system. Meanwhile, C-130s operated via separate USAFE channels. These two different networks of control and support only awkwardly communicated with each other and thereby lost synergy's of mutual support, effectiveness and efficiency. (Krisinger, 1996:17)

These problems experienced during the Joint Endeavor deployment would be magnified if the airlift system supported a major regional contingency. The divided airlift command structure results in no single commander or organization being responsible for the entire airlift operation.

#### *Centralized Command*

Air Force doctrine emphasizes the importance of a single commander of air forces. Joint and Air Force doctrine stress the need for commanders to have the assets available to allow them to accomplish the mission. For this reason the theater JFACC will command the air forces of all the services in the theater of operations. The importance of centralized command cannot be overlooked.

The selection of Iraqi command and control centers as targets during the initial phase of the gulf war highlight the critical nature of command. Without command, forces lose a significant portion of their combat capability. The noted military theorist J. F. C. Fuller said, "Our present theory is to destroy personnel, our new theory should be to destroy command. Not after the enemy's personnel has been disorganized, but before it has been attacked, so that it may be found in a state of disorganization when attacked" (Fuller, 1918). Centralized command makes possible the achievement of synergies, the establishment of priorities, and the ability to minimize conflicting objectives.

While the command of the theater system was assigned to the theater CINC, the command of the strategic system was placed under USTRANSCOM. The only common commander of the two separate airlift systems is the National Command Authority, the President and the Secretary of Defense.

#### *The Airlift Commander*

One possible solution to the divided airlift system and its inefficiency is the appointment of a single airlift commander. The airlift commander could control the theater airlift assets. The theater airlift forces are currently under OPCON of the theater CINC via the JFACC. Theater airlift is planned and executed by the ALCC that is located in the JFACC's command center, the AOC. However, it is very likely that the JFACC will not possess airlift expertise, since most theater aircraft are fighters. The addition of a commander with airlift expertise between the JFACC and the airlift forces adds another level of command but also consolidates the theater airlift structure under an

airlift commander. This proposed structure organizes the theater airlift forces, but what about the strategic airlift forces?

The strategic assets (the aircraft, AME and the TALCEs) are currently under OPCON of USTRANSCOM via AMC. It is against AMC policy to CHOP these assets to the theater commanders. The AMC assets are considered a limited resource and must be operationally controlled by AMC, not the theater. This limits the type of authority the airlift commander can exercise over the strategic forces to TACON.

The airlift commander needs both types of authority, TACON and OPCON, to command and control the strategic support assets supporting the theater. The airlift commander should exercise TACON over the strategic aircraft and assets that will not need to be reorganized while they are operating in the AOR. TACON does not affect administrative support or ownership over forces but allows the airlift commander to give direction and to control forces to accomplish the mission. However, the airlift commander needs to exercise OPCON over the AME and TALCEs supporting the theater. The airlift commander will need the additional authority that OPCON provides to organize and employ these forces for the dynamic theater airlift mission. The designation of TACON and OPCON over the strategic assets should be part of the support Establishing Directive.

One avenue to provide the airlift commander authority over the strategic assets is the Establishing Directive. The Establishing Directive, developed as part of support authority, should specify the type and the duration of authority over the strategic airlift

assets. The airlift commander should be given TACON and OPCON authority over the strategic forces supporting the operation. The Establishing Directive should specify the exact conditions under which OPCON can be exercised over the AMC assets. It is imperative that if the strategic assets need to be removed from the theater, due to a change in national priorities, AMC can easily accomplish that removal. It is also critical that the supported CINC and the airlift commander be informed as soon as possible to minimize the impact on the airlift operation.

There is second option to provide the airlift commander OPCON authority over strategic assets. Authority over non assigned/attached forces can be accomplished by allowing a theater commander to "exercise OPCON" over those forces while they remain under actual OPCON of another CINC. The phrase "exercise OPCON" is not defined in the joint publications, but it has been used in the airlift command structure to define relationships. The authority of "exercise OPCON" is part of the proposed command structure for the Joint Endeavor redeployment. The airlift commander or joint force air component commander could exercise OPCON over the AMC support assets while they remain under actual OPCON of USTRANSCOM. This gives the airlift commander the authority needed to effectively command the entire airlift system while leaving USTRANSCOM the ability to re-prioritize and reassign the scarce support assets. (Lambaria, 1996) Also, because AMC is allowing the theater to have reorganization authority over their strategic assets the airlift commander should come from AMC.

This proposal creates an airlift commander with similar authority to the COMALF. It differs from the COMALF concept in that there is no ALD from which to draw personnel. It does not propose an increase in theater airlift manning or the permanent assignment of an airlift senior officer to the theater. Also unlike the COMALF concept, it does not suggest that the theater airlift forces be assigned to AMC. This proposal simply recommends that an airlift commander, working for the JFACC, be given the authority to control the airlift system supporting the theater.

#### *Solution - The DIRMOBFOR*

The DIRMOBFOR is the ideal person to command the airlift operation. The DIRMOBFOR, normally an AMC general officer, is attached to the theater commander and works directly for the JFACC. The DIRMOBFOR is an airlift expert and a senior officer who is also familiar with the theater. The director has been involved in Blue Flag, command and control, exercises with the JFACC and staff. These exercises develop a personal and working relationship between the DIRMOBFOR and the JFACC.

Although the sample size is small, and each operation unique, the DIRMOBFOR typically develops a command-type relationship with the components over time. However, the DIRMOBFOR currently lacks the formal authority to command the components of the airlift system from the outset.

It is imperative the airlift system have the ability to setup and begin operations quickly. Major General William Begert, the J3/J4 at USTRANSCOM, in a DIRMOBFOR briefing, stressed the importance of getting the airlift forces and

equipment in position quickly. The flow of aircraft and cargo through the system in the first few days of a Major Regional Contingency (MRC) will be enormous. The flow rate will approach the maximum volume within two to three days of initiation. If the airlift system is not ready to handle the flow, command and control will fall behind and struggle to catch up. Well defined command relationships must be in-place before the airlift begins.

The command relations and authority for the DIRMOBFOR must be well defined. The DIRMOBFOR should exercise TACON and OPCON over the strategic, AMC, assets deployed to the theater. The JFACC would need to delegate OPCON of the theater airlift forces to the DIRMOBFOR. Interesting, this proposed setup is very similar to the planned command and control relationship for the Joint Endeavor re-deployment (Figure 7). Such command relationships between the strategic forces may be defined in the Establishing Directive. However, because the Establishing Directive must be developed and written for each operation, the final solution should not rely on the Directive to define the authority of the airlift commander. Instead, the authority should be permanently incorporated into Joint Publication 3-17 and AFDD 6 and 30 to correct the problem.

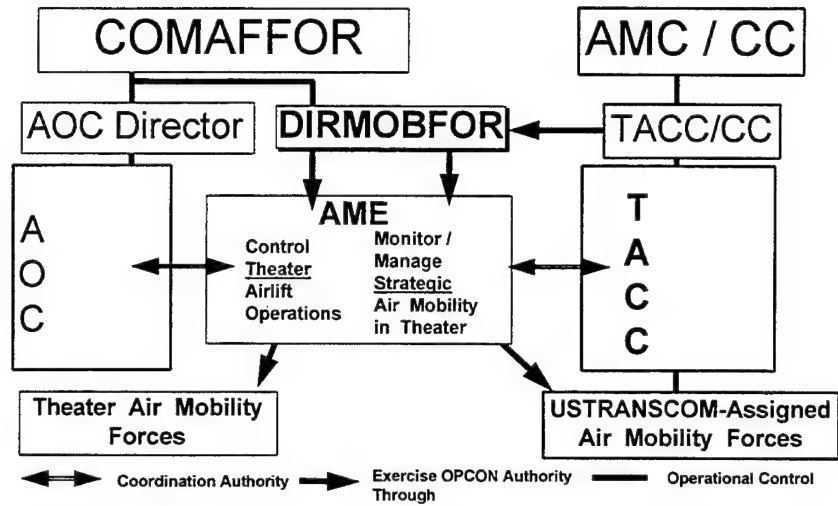


Figure 7. Proposed Joint Endeavor Command Relationships (Lambaria, 1996)

## *VI. Conclusion*

The 1992 reorganization created two airlift systems. The strategic airlift forces in AMC are under COCOM of USTRANSCOM, and are responsible for intertheater lift. They maintain most of the airlift support assets and staff needed to support the theater. The theater airlift forces consist of C-130 aircraft under COCOM of the theater CINC, and are responsible for the intratheater lift. The theater forces currently provide few of the supporting assets and staff for the airlift operation. The two airlift structures must work together during a contingency to provide the airlift support to the theater commander.

The current divided airlift system has not been seriously tested since the reorganization in 1992. There have been numerous humanitarian operations using airlift but only Joint Endeavor has come close to demonstrating how the airlift system works in a contingency. As mentioned earlier, airlift leadership felt that Joint Endeavor was a failure. The day-to-day problems with the airlift system at places like Ramstein, and the lessons learned from Joint Endeavor revealed an airlift system which functions poorly. The airlift system performed poorly even when there was no one shooting. Imagine how the current airlift system might perform in a Korean scenario when the threat of annihilation of US and Korean forces exists.

Bringing the two airlift structures together can be accomplished with a common commander of both systems. The commander must possess the authority necessary to control all the components of the airlift. To exercise sufficient authority the airlift



commander must possess OPCON or TACON over the forces. The airlift commander can receive this authority one of two ways.

Two alternatives for establishing OPCON or TACON over the airlift forces are: 1) have the authority designated in the Establishing Directive; or 2) incorporate the authority into Joint Publication 3-17 and Air Force Doctrine Document 6 and 30. Although both alternatives provide the airlift commander the authority he needs to control the airlift system, doctrinal documents reduce the uncertainty in the command structure.

Establishing doctrinal authority gives the airlift system the ability to start training, exercising and preparing the supporting staff and assets. Along with preparing the assets for the contingency, the leadership would prepare for commanding the airlift operation.

The airlift commander should be a senior officer, with airlift expertise and knowledge of the theater. The DIRMOBFOR is the ideal choice for this commander. The DIRMOBFOR is a senior airlift officer, designated to serve a specific AOR. The DIRMOBFORs routinely participate in Blue Flag command and control exercises, with the designated JFACCs. Additionally, officers qualified for the position of DIRMOBFOR have attended training at the Air Mobility Warfare Center.

To provide airlift support needed by the warfighter to accomplish the assigned mission, the current airlift structure needs to be controlled by one theater-level commander. The airlift system is critical to the success of future operations. It needs to be controlled by a commander with the authority to bring the two systems together and manage the critical seam that exists between them. It is imperative that this command

and control issue be corrected before the airlift system is tested in that environment for which warriors train, but hope never to face.

*Appendix A: Glossary*

ACC:	Air Combat Command
AFCC:	Air Force Component Commander
AFFOR:	Air Force Forces
ALCC:	Airlift Coordination Cell
ALD:	Airlift Division
AMC:	Air Mobility Command
AME:	Air Mobility Element
AOC:	Air Operations Center
AOR:	Area Of Responsibility
APOD:	Aerial Port of Debarkation
APOE:	Aerial Port of Embarkation
CHOP:	Change of Operational Control
CINC:	Commander in Chief (Generally of a Unified Command)
CJCS:	Chairman of the Joint Chiefs of Staff
COMAFFOR:	Commander Air Force Forces
COMMOBFOR:	Commander of Mobility Forces
COMALF:	Commander Of Airlift Forces
DIRMOBFOR:	Director Mobility Forces
EUCOM:	US European Command
GRL:	Global Reach Laydown
ITV:	Intransit Visibility
JFACC:	Joint Force Air Component Commander
JFC:	Joint Force Commander
JTF:	Joint Task Force
JULLS:	Joint Universal Lessons Learned
MAC:	Military Airlift Command
MHE:	Material Handling Equipment
MOG:	Maximum on Ground
MST:	Mission Support Team
NAF:	Numbered Air Force
NCA:	National Command Authority
OL:	Operating Location
RAMCC:	Regional Air Movement Coordination Center
SECDEF:	Secretary of Defense
TACC:	Tanker Airlift Control Center
TALCE:	Tanker Airlift Control Element
USACOM:	US Atlantic Command
USAFE:	US Air Forces Europe

USCENTCOM:	US Central Command
USEUCOM:	US European Command
USPACOM:	US Pacific Command
USTRANSCOM:	US Transportation Command

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## *Vita*

Major Mark A. Melville was born on March 28, 1961 at the Landstuhl Army Hospital near Ramstein AB, West Germany. He graduated from Lackland High School in 1979 and entered the United States Air Force Academy in Colorado. He graduated with a Bachelor of Science degree and received his commission on June 1, 1983.

After graduation from Undergraduate Pilot training at Laughlin AFB and Pilot Instructor Training at Randolph AFB, he was assigned as a T-38 Talon instructor pilot in the 86 Flying Training Squadron. His second assignment was as an aircraft commander, instructor pilot, and evaluator pilot in the Boeing KC-135A at Wurtsmith AFB. His third assignment was at Castle AFB as a Combat Crew Instructor Pilot in the 93 Air Refueling Squadron, and as a Combat Flight Instructor Course pilot. While at Castle AFB he began a Masters of Aeronautical Science degree with Embry Riddle Aeronautical University. His fourth assignment was to Altus AFB as a flight commander in the Combat Flight Instructor Course. Here he finished his Masters degree from Embry Riddle. In 1995 Major Melville entered the Advanced Study of Air Mobility masters degree program at Fort Dix. The masters degree is administered off-site by the Graduate School of Logistics and Acquisition Management, Air Force Institute of Technology.

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